



San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT

FEB 03 2016



HEALTHY AIR LIVING™

Doyle Hibler

All American Oil & Gas Inc dba Western Power & Steam Inc

3300 Manor Street

Bakersfield, CA 93308

RE: Final – Authority to Construct/Certificate of Conformity (Minor Mod)

Facility Number: S-724

Project Number: S-1154126

Dear Mr. Hibler:

The Air Pollution Control Officer has issued the Authority to Construct permit to All American Oil & Gas Inc dba Western Power & Steam Inc for the removal of the steam turbine and lowering of the electrical generator rating to 20 MW of a cogeneration system, at NW Section 6, T29S, R28E.

Enclosed is the Authority to Construct permit. The District's analysis of the proposal was sent to US EPA Region IX on January 21, 2016. No comments were received following the District's preliminary decision on this project.

Prior to operating with the modifications authorized by the Authority to Construct, you must submit an application to modify the Title V permit as an administrative amendment in accordance with District Rule 2520, Section 11.5. Application forms have been enclosed for your use. These forms may also be found on the District's website at www.valleyair.org.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Leonard Scandura at (661) 392-5500.

Sincerely,

Arnaud Marjollet
Director of Permit Services

AM:rue

Enclosures

cc: Gerardo C. Rios, EPA (w/enclosure) via email

Seyed Sadredin

Executive Director/Air Pollution Control Officer

Northern Region

4800 Enterprise Way

Modesto, CA 95356-8718

Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)

1990 E. Gettysburg Avenue

Fresno, CA 93726-0244

Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region

34946 Flyover Court

Bakersfield, CA 93308-9725

Tel: 661-392-5500 FAX: 661-392-5585



AUTHORITY TO CONSTRUCT

PERMIT NO: S-724-1-7

ISSUANCE DATE: 02/03/2016

LEGAL OWNER OR OPERATOR: ALL AMERICAN OIL & GAS COMPANY

MAILING ADDRESS: 3300 MANOR STREET
BAKERSFIELD, CA 93308

LOCATION: HEAVY OIL CENTRAL
NW 06, T29S, R28E
BAKERSFIELD, CA

SECTION: NW06 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF COGENERATION SYSTEM WITH GE LM2500PE 250 MMBTU/HR GAS-FIRED GAS TURBINE ENGINE, 22.1 MW GAS & 7 MW STEAM TURBINE ELECTRICAL GENERATORS, INLET AIR ABSORPTION CHILLER, WATER INJECTION, UNFIRED HEAT RECOVERY STEAM GENERATOR, & BABCOCK-HITACHI SCR SYSTEM: REMOVE 7 MW STEAM TURBINE ELECTRICAL GENERATOR AND REVISE ELECTRICAL GENERATION CAPACITY TO 20 MW

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Operator shall not discharge into the atmosphere combustion contaminants (PM) exceeding in concentration at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
4. Exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods. [District Rule 1080] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

Brandon Marjollet, Director of Permit Services

S-724-1-7 Feb 3 2016 8:28AM - EDGEHILR : Joint Inspection NOT Required

5. System shall be equipped with operational temperature indicator installed at the SCR catalyst inlet, continuously recording fuel gas flowmeter, ammonia flowmeter, and ammonia injection pressure indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Gas turbine engine combustor water injection system shall be equipped with continuously recording water-to-fuel injection rate monitoring system accurate to within 5%. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The owner or operator shall install, certify, maintain, operate and quality-assure a Continuous Emission Monitoring System (CEMS) which continuously measures and records the exhaust gas NO_x and O₂ concentrations. [40 CFR 60.334(b) and District Rule 4703, 6.2.1] Federally Enforceable Through Title V Permit
8. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [40 CFR 60.334(b)(2) and District Rule 1080, 6.4] Federally Enforceable Through Title V Permit
9. The NO_x and O₂ CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specifications 2 and 3, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [40 CFR 60.334(b)(1) and, District Rule 1080, 6.3, 6.5, 6.6, & 7.2] Federally Enforceable Through Title V Permit
10. The CEMS shall be linked to a data logger which is compatible with the District's Data acquisition system. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit
11. The owner or operator shall maintain CEMS records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device is inoperative, and emission measurements. [40 CFR 60.7(b) and District Rule 1080, 7.3] Federally Enforceable Through Title V Permit
12. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NO_x emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [40 CFR 60.334(j), (j)(5) and District Rule 1080, 8.0] Federally Enforceable Through Title V Permit
13. Excess emissions shall be defined as any operating hour in which 4-hour rolling average NO_x concentration exceeds applicable emissions limit and a period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NO_x or O₂ (or both). [40 CFR 60.334(J)(1)(iii)] Federally Enforceable Through Title V Permit
14. Gas turbine engine water injection rate shall be maintained at water-to-fuel ratio documented to result in compliance with emission limits. [District NSR Rule] Federally Enforceable Through Title V Permit
15. Gas turbine shall be shut down if water injection or SCR system is inoperative. [District NSR Rule] Federally Enforceable Through Title V Permit
16. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the monitoring devices required by Rule 1080 to ensure that such devices are functioning properly. [District Rule 1080, 11.0] Federally Enforceable Through Title V Permit
17. Catalyst failure to perform as required due to catalyst poisoning or fouling shall not be recognized as basis for Rule 1100 enforcement exemption. [District NSR Rule] Federally Enforceable Through Title V Permit
18. The start up or shut down time during which the exhaust gas is not within the normal operating temperature range, not to exceed two hours. [District Rule 4703] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. Unit shall be fired exclusively on PUC-regulated natural gas which has a sulfur content of less than or equal to 0.017% by weight. [40 CFR 60.333 (b); 60.332(a); Rule 404 (Madera), 406 (Fresno) and 407 (6 remaining counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
20. The sulfur content of each fuel source shall be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) monitored weekly using ASTM Methods D4084, D5504, D6228, or Gas Processors Association Standard 2377. If sulfur content is less than 1.0 gr/100 scf for 8 consecutive weeks, then the Monitoring frequency shall be every six (6) months. If any six (6) month monitoring show an exceedance, weekly monitoring shall resume. [40 CFR 60.334(h)(3) and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. Gas turbine shall not burn more than 6.32 million SCF per day of natural gas. [District NSR Rule] Federally Enforceable Through Title V Permit
22. Oxides of Nitrogen (NO_x) emissions shall not exceed 7.7 ppmvd at 15% O₂. [District NSR Rule and District Rule 4703, 5.1.2] Federally Enforceable Through Title V Permit
23. Sulfur compounds emissions shall not exceed 0.32 lb/hr of SO_x (as SO₂). [District NSR Rule] Federally Enforceable Through Title V Permit
24. Particulate (PM₁₀) emissions shall not exceed any of the following: 5.66 lb/hr in the turbine exhaust, or 0.58 lb/hr in the lube oil cooler/accumulator vents. [District NSR Rule] Federally Enforceable Through Title V Permit
25. Carbon Monoxide (CO) emissions shall not exceed 48 ppmvd @ 15% O₂. [District NSR Rule and District Rule 4703, 5.2] Federally Enforceable Through Title V Permit
26. Volatile Organic Compounds (VOC) emissions shall not exceed 5.38 lb/hr in the turbine exhaust or 0.58 lb/hr in the lube oil cooler/accumulator vents. [District NSR Rule] Federally Enforceable Through Title V Permit
27. NO_x and CO emissions shall be measured by District-witnessed, or authorized, sample collection by an independent testing laboratory annually within 60 days prior to the anniversary of the permit issuance date. [District NSR Rule and District Rule 4703] Federally Enforceable Through Title V Permit
28. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
29. Official test results and field data shall be submitted to the District within 60 days after collection. [District Rule 1081] Federally Enforceable Through Title V Permit
30. Performance testing shall be conducted annually to measure NO_x and CO emission concentrations using the following test methods: EPA Methods 7E or 20 for NO_x emissions, EPA Methods 10 or 10B for CO emissions, EPA Methods 3, 3A, or 20 for Oxygen content of the exhaust gas. The 9-run tests shall be performed at the highest load of the gas turbine physically achievable on the date of the performance test. [40 CFR 60.335(a), (b)(7) and District Rule 4703, 6.3.1, 6.4.1, 6.4.2, & 6.4.3] Federally Enforceable Through Title V Permit
31. Ammonia injection rate shall be controlled to maintain ammonia "breakthrough" to less than 50 ppmvd. [District NSR Rule] Federally Enforceable Through Title V Permit
32. A violation of NO_x emission standards indicated by the NO_x CEM shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit
33. Operator shall notify the APCO no later than eight hours after the detection of a breakdown of the CEM. Operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [District Rule 1080, 10.0] Federally Enforceable Through Title V Permit
34. Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13. [40 CFR 60.13 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit
35. Permittee shall maintain on file, copies of natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

36. Records of daily amount of fuel gas consumption shall be maintained on the premises for a period of at least five years and shall be made readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
37. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation, and quantity of fuel used. [District Rule 4703, 6.2.6] Federally Enforceable Through Title V Permit
38. The operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit